spu Seattle Public Utilities
CAM Client Assistance Memo 1302
Seattle Permits
— part of a multi-departmental series on applying for City services

Building Material Salvage and Recycling

September 2006

Why Should You Reuse and Recycle Building Materials?

- Send less waste to the landfill
- Give usable items another life
- Reduce natural resource use
- Save money
- Cut greenhouse gas emissions
- Support the local material reuse and recycling industry
- Earn green building rating system points (e.g., Built Green™, LEED™)

Many opportunities exist to reuse and recycle building materials that come from both demolition and new building projects.

Salvage: The removal of select materials from a building prior to demolition. These materials include items such as architectural features, cabinets, windows, and wood flooring.

Recycling: The collection and processing of certain materials, which are then manufactured into new products (e.g. metals)

DEMOLITION PHASE

Salvage Before Demolition

The typical home or commercial space often contains numerous reusable items. This is particularly true with older buildings. Items frequently desirable for reuse include large timbers, wood flooring, wood trim, cabinets, double-pane windows, dimensional lumber, and (non-hollow core) doors. Dimensional lumber is particularly desirable but can sometimes be difficult or expensive to remove. The most important consideration to maximizing reuse is to plan ahead and provide time for removal of desirable items. Salvage can begin at the beginning of a construction project, before demolition and hazardous waste abatement. Salvaging of non-structural items can begin before a demolition permit has been issued.

If you do not have the time or knowledge to find outlets for potentially reusable items, call one of the local used building material stores. Store staff is typically available to visit a site to determine whether potentially-salvageable items are desired by their business.

Some of the used building material stores provide deconstruction and salvage services. If a building contains enough desired materials, store staff may be able to remove the items from the building at no charge, and many are able to provide receipts to allow for a tax deduction based on the value of the materials. Any items removed before a building is demolished will reduce disposal costs.

Think creatively for other ways to reuse materials before sending them to the landfill. Consider salvaging materials from an old building for reuse in a new building, on the same site. For example, high grade lumber may be salvaged and cut into trim or made into furnishings for the new building. Concrete may be ground and re-used on site in place of gravel or aggregate.

One alternative to using a salvage company is to hold a "Demo Sale" before a building is demolished. This involves letting the public into the building to remove non-structural windows, trim, doors, flooring, cabinets, etc., before the building is flattened. If you plan to pursue this option, check your insurance policy for liability coverage.

Recycle During Demolition

City of Seattle ordinance requires businesses to recycle certain items, such as paper, cardboard, and yard debris. Other recyclables coming out of a demolition project can include wiring, plumbing fixtures, metal studs, and structural supports.

Worker salvaging reusable dimensional lumber during a home deconstruction.

Photo by: The Reuse People

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Be careful about metal ductwork, which often has asbestos tape or insulation attached to it. For comprehensive information about materials that can be recycled and local recyclers, contact the Resource Venture at (206) 343-8505 or at www.resourceventure.org

Safety

When salvaging materials for reuse and recycling, be mindful about safety. HAZARDOUS MATERIALS OR SITUATIONS MAY RESTRICT THE ABILITY TO SALVAGE ITEMS, such as asbestos-containing tile or mastic above wood flooring. Be aware of surfaces which may contain lead based paint. Avoid cutting such surfaces, and minimize dust generation.

CONSTRUCTION PHASE

Using Salvaged and Recycled Content Materials

The key to encouraging and maintaining steady markets for salvaged and recycled materials is to integrate them into new projects. It is important to consider how to integrate salvaged materials early, during the design phase. Client Assistance Memo 336, ***Sustainable Building and Reuse of Building Materials***, provides a comprehensive look at the necessary code considerations for integrating specific types of materials into projects. Used building materials stores stock an ever-changing variety of flooring, doors, trim, windows and other miscellaneous items.

For large projects or small, recycled-content materials can also help "close the loop" of the recycling process. Gypsum wallboard, plastic-composite deck materials, metal materials, and acoustic ceiling tiles frequently are available with recycled content. To ensure products contain recycled content, be sure to research available products and specify desired percentages of recycled content. Contact the Resource Venture at (206) 343-8505 for more information.

Minimizing Waste: Maximizing Reuse and Recycling During Construction

Surplus materials

Most new construction projects will result in extra "left-over" materials. Depending on the volume, you may have a number of choices for how to reuse certain materials. Potential reuse outlets include used building material stores, on-line resources, and one-time used building material sales.

Recycling

If materials can't be reused, look to optimize recycling. Recyclable materials generated during construction include clean wood, metals, gypsum wallboard, and cardboard/paper. Some waste haulers require separation of materials on the jobsite.

Others are able to provide a container for all types of "commingled" recycling, to be sorted later at an outside facility. In general, separating materials for recycling will reduce contamination and increase the amount of material actually recycled.

Resources

Recycling

For comprehensive information about recycling options for different materials, contact the Resource Venture at (206) 343-8505 or online at www.resourceventure.org The Resource Venture can provide you with the Contractor's Guide to Waste Prevention and Recycling, and the Construction Recycling Directory. The Resource Venture is a good source for assistance with non-standard recycling, such as acoustic ceiling tile, drywall, porcelain, roofing, and plant/tree salvage.

Reuse

Local building materials stores work together to encourage used building materials markets through the Northwest Building Salvage Network. Visit www.nbsnonline.org for more information.

For more information about local deconstruction and reuse companies and services, see the Building Salvage and Deconstruction Services sheet in the DPD Demolition packet.

For detailed information and ideas about integrating salvaged building materials into your construction project, take a look at the Salvage and Reuse Green Home Remodel guide, linked from www.seattle.gov/sustainablebuilding

Safety

Asbestos: Puget Sound Clean Air Agency
www.pscleanair.org/asbestos/

Lead based Paint: Environmental Protection Agency (EPA)
www.epa.gov/lead

PCB-containing fluorescent ballasts: EPA and search www.epa.gov for "PCB ballasts."